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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/833,845	04/11/2001	Vladimir Matena	SUNMP003	2223
25920 7590 08/08/2007 MARTINE PENILLA & GENCARELLA, LLP 710 LAKEWAY DRIVE SUITE 200 SUNNYVALE, CA 94085			EXAMINER YIGDALL, MICHAEL J	
			ART UNIT 2192	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/833,845

Applicant(s)

MATENA ET AL.

Examiner

Michael J. Yigdoll

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-8 and 10-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-8 and 10-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 14, 2007 has been entered. Claims 1, 4-8 and 10-13 are pending.

Response to Arguments

2. Applicant's arguments have been fully considered but they are not persuasive.

Applicant again states, "Ma does not explicitly suggest or teach generating an updated control module defining upgraded application-specific policies relative to the original control module or maintaining a recoverable state of the upgraded control module at a state server" (remarks, page 6).

However, as set forth in the Office action, the combination of Ma and Ferguson teaches or suggests generating an updated control module defining upgraded application-specific policies relative to the original control module. Likewise, the combination of Ma, Ferguson and Arnaiz teaches or suggests maintaining a recoverable state of the upgraded control module at a state server. Applicant is respectfully reminded that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981), and *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant notes that in Ferguson, any requests for software that is to be upgraded on an application server that is to be upgraded are routed to another application server while the upgraded control and service modules are generated (remarks, page 6). Applicant further notes that the system waits until the application server is no longer servicing any active requests before generating and upgrading the control and service modules (remarks, page 7).

However, the examiner does not agree with Applicant's conclusion that Ferguson's teachings indicate "that the generation and updating of application upgrades are performed on the server by disrupting the application service on the server to-be-upgraded which is against the teaching of the claimed invention" (remarks, page 7).

To the contrary, Ferguson's teachings indicate that service is *not* disrupted while upgrades are performed. Instead of disrupting active requests, the system waits until the application server finishes servicing those requests before performing the upgrades. Likewise, instead of disrupting new requests, the system redirects those requests to another application server while performing the upgrades.

Moreover, as noted in the Office action, Ma teaches that "the distributed-object client-server application is updated while running" (column 4, lines 62-63) and that "the application is not stopped so that updating of objects is transparent" (abstract). Thus, in Ma, service is not disrupted while upgrades are performed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4-8 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,920,725 to Ma et al. (art of record, "Ma") in view of U.S. Patent No. 6,976,079 to Ferguson et al. (art of record, "Ferguson") in view of U.S. Patent No. 7,080,371 to Arnaiz et al. (art of record, "Arnaiz").

With respect to claim 1 (currently amended), Ma discloses a method for performing an online upgrade to a JAVA application (see, for example, the abstract, which shows a method for performing an online upgrade to an application, and column 13, lines 18-39, which shows that the application is a JAVA application), the method comprising:

executing an application on a server without remote client execution, the execution being in a middle-tier between a client browser and databases (see, for example, FIG. 5, which shows executing a server application 86 in a middle-tier server 90 between a remote client 88 and an application database 64, and column 7, lines 54-56, which shows a remote client that is idle or without remote client execution), the application having an original service module (see, for example, objects 82 in FIG. 5) and an original control module (see, for example, object adaptor 80 and workflow adaptor 84 in FIG. 5), wherein the original control module includes application-specific policies for the application defining application-specific strategies and policies for the application (see, for example, application-specific rules 81 in FIG. 5, and column 8, lines 37-39 and 58-62), and the original service module includes actual code for the application (see, for example, column 13, lines 49-55).

Ma further discloses defining upgraded application-specific policies relative to the original control module (see, for example, column 8, line 55), but does not expressly disclose:

generating an upgraded control module defining upgraded application-specific policies relative to the original control module.

However, Ferguson discloses an analogous method for performing an online upgrade to a JAVA application (see, for example, the abstract, and column 2, lines 25-37) that comprises executing an application on a middle-tier server (see, for example, FIG. 1) without remote client execution (see, for example, column 1, lines 42-56). In addition to upgrading the application software, or the module that includes the code for the application, Ferguson also discloses upgrading the server software, or the module that controls the application on the server (see, for example, column 6, lines 8-22), so as to provide new or more reliable functionality in either module (see, for example, column 1, lines 32-41). The application software and server software are comparable to the service module and control module of Ma, respectively.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to generate an upgraded control module in Ma, so as to provide new or more reliable functionality in that module, such as taught by Ferguson.

Ma in view of Ferguson further discloses the upgraded control module being defined by upgraded class files (see, for example, new object class 68 in FIG. 3, and column 6, lines 58-60) loaded from a system repository that is part of the databases (see, for example, meta object database repository 62 in FIG. 3, and column 6, lines 39-40 and 52-55); and

creating an upgraded service module using the upgraded control module (see, for example, column 8, lines 10-13), the upgraded service module is generated using upgraded class

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files for the upgraded service module loaded from the system repository (see, for example, new object class 68 and meta object database repository 62 in FIG. 3, and column 6, lines 31-34, 52-55 and 58-60);

upgrading the original control module and original service module, the upgrading performed in place with no disruption in service (see, for example, column 4, lines 59-63, which shows upgrading the modules with no disruption in service), wherein the original control module and the upgraded control module respectively supervise a life cycle of the original control module and upgraded control module (see, for example, FIG. 8, which shows that object adaptor 80 supervises a life cycle of the original and upgraded modules), such that the application-specific strategies and policies for the application are maintained during execution (see, for example, column 8, line 66 to column 9, line 5).

Ma in view of Ferguson further discloses a state server (see, for example, meta server 70 in FIG. 5), but does not expressly disclose that a recoverable state of the upgraded control module is maintained in a state server.

However, Arnaiz discloses an analogous method for performing an upgrade to an application (see, for example, the abstract). Arnaiz further discloses maintaining a recoverable state of the upgrade (see, for example, column 19, lines 34-39), so as to roll back and restart the upgrade if there are any errors (see, for example, column 3, lines 55-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to supplement Ma in view of Ferguson such that a recoverable state of the upgraded control module is maintained in a state server, so as to roll back and restart the upgrade if there are any errors, such as taught by Arnaiz.

With respect to claim 4 (previously presented), the rejection of claim 1 is incorporated, and Ma in view of Ferguson in view of Arnaiz further discloses the operation of disabling requests to the original service module (see, for example, column 7, lines 22-25 and 40-45, which shows disabling requests to the original objects by marking them as invalid and deleting them).

With respect to claim 5 (original), the rejection of claim 4 is incorporated, and Ma in view of Ferguson in view of Arnaiz further discloses the operation of enabling requests to the upgraded service module (see, for example, column 7, lines 22-25 and 40-45, which shows enabling requests to the upgraded objects by loading and instantiating them).

With respect to claim 6 (original), the rejection of claim 1 is incorporated, and Ma in view of Ferguson in view of Arnaiz further discloses the operation of upgrading a child application using the upgraded control module (see, for example, column 7, lines 46-51).

With respect to claim 7 (previously presented), the rejection of claim 6 is incorporated, and Ma in view of Ferguson in view of Arnaiz further discloses the operation of passing the application-specific policies to a control module of the child application (see, for example, column 8, lines 20-25).

With respect to claim 8 (currently amended), Ma discloses a JAVA platform capable of performing online software upgrades (see, for example, the abstract, which shows a platform capable of performing online software upgrades, and column 13, lines 18-39, which shows that the platform is a JAVA platform), the JAVA platform comprising:

an application being executed on a server without remote client execution, the execution being in a middle-tier between a client browser and databases (see, for example, FIG. 5, which shows a server application 86 in a middle-tier server 90 between a remote client 88 and an application database 64, and column 7, lines 54-56, which shows a remote client that is idle or without remote client execution), the application having an original service module (see, for example, objects 82 in FIG. 5) and an original control module (see, for example, object adaptor 80 and workflow adaptor 84 in FIG. 5), wherein the original control module includes application-specific policies for the application defining application-specific strategies and policies for the application (see, for example, application-specific rules 81 in FIG. 5, and column 8, lines 37-39 and 58-62), the original service module includes actual code for the application (see, for example, column 13, lines 49-55); and

a system repository that is part of the databases having upgraded class files for the original control module and upgraded class files for the original service module (see, for example, meta object database repository 62 and new object class 68 in FIG. 3, and column 6, lines 39-40 and 52-55),

Ma further discloses defining upgraded application-specific policies relative to the original control module (see, for example, column 8, line 55), but does not expressly disclose:

wherein the original control module is upgraded by generating an upgraded control module defining upgraded application-specific policies relative to the original control module.

However, Ferguson discloses an analogous JAVA platform capable of performing online software upgrades (see, for example, the abstract, and column 2, lines 25-37) that comprises an application on a middle-tier server (see, for example, FIG. 1) without remote client execution

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(see, for example, column 1, lines 42-56). In addition to upgrading the application software, or the module that includes the code for the application, Ferguson also discloses upgrading the server software, or the module that controls the application on the server (see, for example, column 6, lines 8-22), so as to provide new or more reliable functionality in either module (see, for example, column 1, lines 32-41). The application software and server software are comparable to the service module and control module of Ma, respectively.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to generate an upgraded control module in Ma, so as to provide new or more reliable functionality in that module, such as taught by Ferguson.

Ma in view of Ferguson further discloses the upgraded control module being defined by upgraded class files (see, for example, new object class 68 in FIG. 3, and column 6, lines 58-60) loaded from the system repository that is part of the databases (see, for example, meta object database repository 62 in FIG. 3, and column 6, lines 39-40 and 52-55), and wherein the original service module is upgraded by creating an upgraded service module using the upgraded control module (see, for example, column 8, lines 10-13), the upgraded service module is generated using upgraded class files for the upgraded service module loaded from the system repository (see, for example, new object class 68 and meta object database repository 62 in FIG. 3, and column 6, lines 31-34, 52-55 and 58-60), the application providing online execution services when upgrading the original control module and original service module, the upgrading performed in place with no disruption in service (see, for example, column 4, lines 59-63, which shows that the application provides online execution services when upgrading the modules and that the upgrading is performed with no disruption in service), wherein the original control

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module and the upgraded control module respectively supervise a life cycle of the original control module and upgraded control module (see, for example, FIG. 8, which shows that object adaptor 80 supervises a life cycle of the original and upgraded modules), such that the application-specific strategies and policies for the application are maintained during execution (see, for example, column 8, line 66 to column 9, line 5).

Ma in view of Ferguson further discloses a state server (see, for example, meta server 70 in FIG. 5), but does not expressly disclose that a recoverable state of the upgraded control module is maintained in a state server.

However, Arnaiz discloses an analogous method for performing an upgrade to an application (see, for example, the abstract). Arnaiz further discloses maintaining a recoverable state of the upgrade (see, for example, column 19, lines 34-39), so as to roll back and restart the upgrade if there are any errors (see, for example, column 3, lines 55-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to supplement Ma in view of Ferguson such that a recoverable state of the upgraded control module is maintained in a state server, so as to roll back and restart the upgrade if there are any errors, such as taught by Arnaiz.

With respect to claim 10 (previously presented), the rejection of claim 8 is incorporated, and the limitations recited in the claim are analogous to those of claim 4 (see the rejection of claim 4 above).

With respect to claim 11 (previously presented), the rejection of claim 10 is incorporated, and the limitations recited in the claim are analogous to those of claim 5 (see the rejection of claim 5 above).

With respect to claim 12 (previously presented), the rejection of claim 8 is incorporated, and the limitations recited in the claim are analogous to those of claim 6 (see the rejection of claim 6 above).

With respect to claim 13 (previously presented), the rejection of claim 12 is incorporated, and the limitations recited in the claim are analogous to those of claim 7 (see the rejection of claim 7 above).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Yigdall whose telephone number is (571) 272-3707. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael J. Yigdall
Examiner
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